

CLAIMS

1. (Currently Amended). A topical skin darkening composition comprising: (i) At least one tyrosinase substrate agent, and (ii) At least one tyrosinase activator agent.
2. (Canceled). A topical skin darkening or skin tanning composition comprising: (i) At least one tyrosinase substrate composition for melanin synthesis boost, and (ii) At least one tyrosinase activator composition, and (iii) At least one skin surface coloring composition, and (iv) A cosmetically or pharmaceutically suitable carrier composition or delivery system.
3. (Currently Amended). A composition according to claim 1 wherein, (i) From about 0.0001% to about 60% of at least one tyrosinase substrate agent for melanin synthesis boost, and (ii) From about 0.0001% to about 20% of at least one tyrosinase activator agent.
4. (Currently Amended). A composition according to claim 1 wherein tyrosinase substrate agent is selected from tyrosine, dihydroxy phenylalanine, L-DOPA, Mucuna pruriens extract, catechol, and their structural chemical analogs.

5. (Currently Amended). A composition according to claim 1 wherein tyrosinase activator agent is selected from copper ATP, Glutathione, Cystine, Cysteine, N-Acetyl-Cystine, N-Acetyl-Cysteine, copper cystine complex, copper cysteine complex, copper N-acetyl-cystine complex, copper N-acetyl-cysteine complex, copper tyrosine complex, copper L-DOPA complex, copper Mucuna pruriens complex, copper glutathione complex, copper carnosine complex, and combinations thereof.

6. (Canceled). A composition according to claim 1 wherein cosmetically or pharmaceutically acceptable delivery system or carrier base can optionally include additional skin beneficial ingredients selected from skin cleansers, surfactants (cationic, anionic, non-ionic, amphoteric, and zwitterionic), skin and hair conditioning agents, vitamins, hormones, minerals, plant extracts, anti-inflammatory agents, concentrates of plant extracts, emollients, moisturizers, skin protectants, humectants, silicones, skin soothing ingredients, analgesics, skin penetration enhancers, solubilizers, moisturizers, emollients, anesthetics, colorants, perfumes, preservatives, seeds, broken seed nut shells, silica, clays, beads, luffa particles, polyethylene balls, mica, pH adjusters, processing aids, and combinations thereof.

7. (Currently Amended). A composition according to claim 1 wherein a cosmetically acceptable delivery system or a carrier base is included.

8. (Canceled). The compositions according to claim 1 wherein the cosmetically or pharmaceutically acceptable delivery system can be traditional water and oil emulsions, suspensions, colloids, microemulsions, clear solutions, suspensions of nanoparticles, emulsions of nanoparticles, powders, or anhydrous compositions.

9. (Canceled). A composition according to claim 2 wherein, (i) From about 0.0001% to about 60% of at least one tyrosinase substrate composition for melanin synthesis boost, and (ii) From about 0.0001% to about 20% of at least one tyrosinase activator composition and, (iii) From about 0.0001% to about 40% of at least one skin surface coloring composition, and (iv) From about 1% to about 99% of a cosmetically or pharmaceutically suitable carrier composition or delivery system.

10. (Canceled). A composition according to claim 2, wherein skin surface coloring composition can be selected from, but not limited to dihydroxyacetone (DHA), lawsone, juglone, erythrulose, glyceraldehyde, 6-aldo-D-fructose, hydroxymethylglyoxal, mucondialdehyde, malealdehyde, substituted succindialdehydes, methylglyoxal (pyruvaldehyde) and substituted 4,4'-dihydroxypyrazolin-5-ones, henna, various Arianor dyes, melanin, caramel, charcoal, and combinations thereof.

11. (Canceled). A composition according to claim 2 wherein cosmetically or pharmaceutically acceptable delivery system or carrier base can optionally include additional skin beneficial ingredients selected from skin cleansers, surfactants (cationic, anionic, non-ionic, amphoteric, and zwitterionic), skin and hair conditioning agents, vitamins, hormones, minerals, plant extracts, anti-inflammatory agents, concentrates of plant extracts, emollients, moisturizers, skin protectants, humectants, silicones, skin soothing ingredients, analgesics, skin penetration enhancers, solubilizers, moisturizers, emollients, anesthetics, colorants, perfumes, preservatives, seeds, broken seed nut shells, silica, clays, beads, luffa particles, polyethylene balls, mica, pH adjusters, processing aids, and combinations thereof.

12. (Canceled). A composition according to claim 2 wherein a cosmetically acceptable delivery system or a carrier base can be selected in the form of a lotion, cream, gel, spray, thin liquid, body splash, mask, serum, solid cosmetic stick, lip balm, shampoo, liquid soap, bar soap, bath oil, cologne, hair conditioner, salve, collodion, impregnated patch, impregnated strip, skin surface implant, and any other such cosmetically or pharmaceutically acceptable topical delivery forms.

13. (Canceled). The compositions according to claim 2 wherein the

cosmetically or pharmaceutically acceptable delivery system can be traditional water and oil emulsions, suspensions, colloids, microemulsions, clear solutions, suspensions of nanoparticles, emulsions of nanoparticles, powders, or anhydrous compositions.

14. (New). A composition according to claim 4, wherein tyrosinase substrate agent is *Mucuna pruriens* extract.

15. (New). A composition according to claim 5, wherein tyrosinase activator agent is copper ATP, also known as copper adenosine triphosphate.

16. (New). A composition according to claim 7, wherein a cosmetically acceptable delivery system is selected from a lotion, cream, gel, spray, thin liquid, body splash, mask, serum, solid cosmetic stick, lip balm, shampoo, liquid soap, bar soap, bath oil, cologne, hair conditioner, salve, collodion, impregnated patch, impregnated strip, or skin surface implant.

17. (New). The compositions according to claim 7, wherein the cosmetically or pharmaceutically acceptable carrier base is selected from traditional water and oil emulsions, suspensions, colloids, microemulsions, clear solutions, suspensions of nanoparticles, emulsions of nanoparticles, powders, or anhydrous compositions.

18. (New). A composition according to claim 16, wherein a cosmetically acceptable delivery system is a lotion.

19. (New). The compositions according to claim 17, wherein the cosmetically or pharmaceutically acceptable carrier base is a water and oil emulsion.